

Serial No. 10/520,238
Atty. Doc. No. 2002P02127WOUS

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Amendments To The Claims:

Please amend the claims as shown.

1 – 12 (cancelled)

13. (currently amended) An oxidation resistant component, comprising:

a substrate; and

a protective layer, comprising:

an intermediate MCrAlY layer zone near the substrate wherein M is at least one element selected from the group consisting of Co, Fe, and Ni;

an outer layer zone arranged on the intermediate MCrAlY layer zone and comprising the elements Al in the range of 21wt% to 37wt%, Ni, at least one element selected from the group consisting of Chromium, and Cobalt, and having the outer layer zone consisting of a structure of the phase β-NiAl; and

wherein the outer layer zone has a thickness in the range of approximatly 1 micron to 50 microns, wherein the thickness is thinner than the intermediate MCrAlY layer zone.

14. (cancelled)

15. (previously presented) The oxidation resistant component according to claim 13, wherein the protective layer consists of two separated layers.

16. (previously presented) The oxidation resistant component according to claim 13, wherein the component is a turbine component having application in a gas turbine.

17. (previously presented) The oxidation resistant component according to claim 13, the protective layer comprising a continuously graded concentration of the composition of the intermediate and outer layer zones.

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18. – 19. (cancelled)

20. (currently amended) The oxidation resistant component according to claim 13, wherein at least one of the intermediate MCrAlY-layer zone ~~or~~ and the outer layer zone contains an additional element selected from the group consisting of (in wt%): 0.1%-2% Si, 0.2% - 8% Ta and 0.2% - 5% Re.

21. – 23. (cancelled)

24. (previously presented) The oxidation resistant component according to claim 13, wherein an element out of the group Hf, Zr, La, Ce, and other elements of the Lanthanide group is added to the outer layer zone in an amount of about 1 wt%.

25. – 27. (cancelled)

28. (currently amended) The oxidation resistant component according to claim 13, wherein a thermal barrier coating is formed on the outer layer zone, the outer layer zone further comprising a concentration of at least one element selected from the group consisting of Ti and Sc in the range of 0.01 and 1.0wt%.

29. (previously presented) The oxidation resistant component according to claim 28, wherein a heat treatment prior to applying the thermal barrier coating is accomplished in an atmosphere with a low oxygen partial pressure in the range of 10^{-7} to 10^{-15} bar.

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30. (currently amended) An oxidation resistant turbine component in a combustion turbine, comprising:

a substrate; and

a protective layer, comprising:

an intermediate MCrAlY layer zone near the substrate wherein M is an element selected from the group consisting of Co, Fe, and Ni, the intermediate MCrAlY layer comprising an amount of Al in the range of about 8% to 14 wt %;

an outer layer zone arranged on the intermediate MCrAlY layer zone and comprising the elements Al in the range of 3% to 6.5 wt %, Ni, Chromium, and Cobalt and having the structure of a γ -Ni matrix at a temperature of between about 900° to 1100°C; and

the outer layer zone further comprising a concentration of at least one element selected from the group consisting of Ti and Sc in the range of 0.01 and 1.0 wt%.

31. (previously presented) The oxidation resistant component according to claim 30, the outer layer zone comprising a composition (in wt%): 20% to 30% Cr, 10% to 30% Co, 5% to 6% Al and a Ni base and wherein the outer layer zone has a thickness of between about 3 and 20 micrometers.

32. (previously presented) The oxidation resistant component according to claim 30, wherein the outer layer zone further comprising an element of the group consisting of Hf, Zr, La, Ce and other elements of the Lanthanide group substituted for Y in a concentration in the range of about 0.01 to 1 wt %.